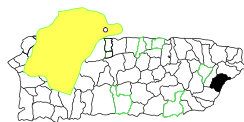


# FRONTERA CREEK

## PUERTO RICO

EPA ID# PRD980640965



## EPA REGION 2 CONGRESSIONAL DIST. 01

Humacao County  
Rio Abajo

**Other Names:**  
**Ciudad Cristiana**

### Site Description

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The 100-acre Frontera Creek site consists of areas that lie east of the town of Junquito and extend to the creeks that enter into the Caribbean Sea, industrial properties adjacent to Frontera Creek, North and South Frontera Lagoons, and the Ciudad Cristiana Housing Development. From 1971 until 1981, various nearby industrial properties discharged industrial waste directly into Frontera Creek. The public became concerned about the creek's possible contamination in 1977, following the death of thirty cows that had grazed in the affected area. Subsequent investigations by the EPA and several local industries confirmed that contaminants, including mercury and the pesticide lindane, were present in the creek. Several industries were identified as contributing to site contamination. The Puerto Rico Environmental Quality Board (PREQB) fined one of them, Technicon, for discharging mercury into the creek in 1978. The 500 residents of the housing development of Ciudad Cristiana, which was built along the creek in 1979, began to complain of health problems within a year after their arrival. Blood and urine samples of the residents, obtained by the Puerto Rico Department of Health (PRDH), showed above-normal concentrations of mercury. In addition, investigations conducted by the PREQB found that soil in and near the development was contaminated with mercury. As a result, the Governor of Puerto Rico ordered an immediate permanent evacuation of the 500 residents of Ciudad Cristiana. Studies conducted by the EPA and the Agency for Toxic Substances and Disease Registry (ATSDR) concluded that the mercury levels were not high enough to warrant an immediate evacuation of the residents. However, the EPA proceeded with a full investigation of the Frontera Creek site because of the known contamination. Local residents used the lagoons for fishing and recreation; the fish and the shellfish caught there were important components of the local diet.

**Site Responsibility:** This site is being addressed through Federal and potentially responsible parties' actions.

#### **NPL LISTING HISTORY**

Proposed Date: 12/01/82

Final Date: 09/01/83

Notice of Deletion Date 12/29/98

## Threats and Contaminants

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Mercury in the sediments in the Technicon ditch and the soils on the Technicon property may present a risk to workers or others that come in contact with the soils.

## Cleanup Approach

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This site is being addressed in a single long-term remedial phase focusing on cleanup of the entire site.

## Response Action Status

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**Entire Site:** The plan for investigating the site contamination, conducted by the potentially responsible parties, was approved by the EPA and the Commonwealth of Puerto Rico in 1986. The investigation was completed in 1991. EPA signed the Record of Decision for the site in September 1991 selecting excavation of the sediments in the Technicon ditch leading to Frontera Creek and also selected removing some soils on the Technicon property. The responsible parties, Miles Diagnostics Corporation; Miles, Inc.; Cooper Development Company; and Revlon, Inc. entered into a Consent Decree to perform the clean up selected by EPA and to reimburse past and future cost of the United States. The ROD for the Site was issued on September 30, 1991 and identified excavation and off-site disposal of mercury contaminated soils and sediments as the recommended remedy for the site. Field activities associated with the implementation RA were completed on March 1995. A total of approximately 800 cubic yards of sediments and soils from Technicon facility were excavated and disposed on the U.S. Mainland. The clean-up level was 35 ppm of mercury and based on a human health risk assessment. This work was completed on April 24, 1995 and the Site is pending for deletion. Activities at the Site have resulted in the removal of mercury contaminated soils and sediments from the Site, provided for secure off-site disposal of the contaminated soils and sediments, minimized the potential for future impact to human health and the environmental, provided for unlimited use, unrestricted exposure, and eliminated the need for future Site control actions with respect to chemicals of concern.

**Site Facts:** An Administrative Order on Consent was signed by the potentially responsible parties in 1986, requiring them to perform an investigation of site contamination. The Consent Decree for the remedial action was signed by the responsible parties in May 1992 and entered in Federal District Court on October 8, 1993. The Remedial Design Work Plan was approved by EPA on August 3, 1993. Field Activities associated with the remedial design were completed in October 1993. The Remedial Design Report was completed on September 28, 1994. A Remedial Action Work Plan was approved by EPA on December 27, 1994. Field activities associated with the implementation Remedial Action was completed in March 1995. Clean-up level was 35 ppm of Mercury and based on a human health risk assessment. The clean-up activities were completed in 3rd Q 1995. This site meets all the site completion requirements as contained in "Close Out Procedures for National

Priorities List Sites” (OSWER Directive 9320.2-09). Confirmatory sampling verified that the site has achieved the ROD cleanup objective, that all mercury has been removed to levels below 35 mg/kg, and that all cleanup actions specified in the ROD have been implemented. Federal Superfund cleanup activities have been completed at the site and post-cleanup monitoring shows that the threat to human health and the environment has been eliminated. On December 29, 1998 the Site was deleted from the NPL. The public comment period began on July 30, 1998 and was extended for 30 days. EPA held a public availability session on the proposal to delete the Site from the NPL on August 20, 1998 at the Humacao Town Hall. EPA received two letters offering comments. EPA responded to the letters and no further action is required. The Notice of deletion from the Site from the National Priorities List was published on December 29, 1998.

## Environmental Progress



On April 6, 1999, EPA issued a Bill For Collection for oversight costs incurred by EPA seeking reimbursement from Revlon in the amount of \$685,268.02. Revlon will make a payment in the amount of \$246,243.37. The remaining amount of \$439,024.65 will be placed in escrow pending resolution of Revlon claims. Revlon requested costs’ backup documentation and to extend the time for negotiations until a reasonable period of time after Revlon has received the requested documentation. RPM & ORC are working in the cost recovery actions.

Since the remedial action has been completed, EPA does not anticipate taking any further Superfund action at this Site and initiated the deletion activities.